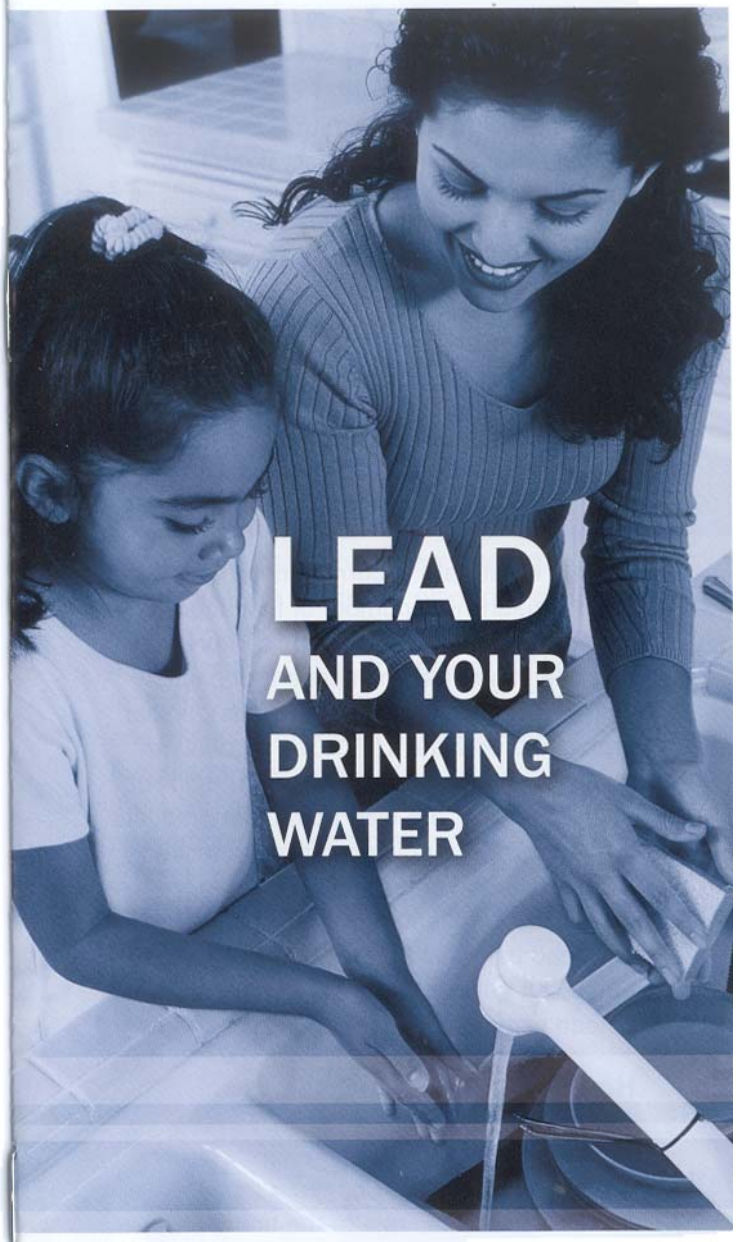
Your Water | Your Health | Our Priority℠



LEAD AND YOUR DRINKING WATER

American Water Works Association

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Water providers are committed to protecting you and your family from lead in drinking water.

Read this brochure to increase your awareness of

- Lead In Our Environment
- Health Concerns Associated With Lead
- How Lead Can Get Into Drinking Water
- What's Being Done To Protect You
- What You Can Do

Lead is a naturally occurring metal that was used regularly in a number of industrial capacities for most of the 20th century. Lead has been used as a component of paint, piping (including water service lines), solder, brass, and until the 1980s, as a gasoline additive. We no longer use lead in many of these products, but lead from older products remains. The US Environmental Protection Agency (USEPA) and the US Centers for Disease Control and Prevention (CDC) report that lead paint (and the contaminated dust and soil it generates) is the leading source of lead exposure in older housing.

Health Concerns Associated With Lead

Lead builds up in the body over many years and can cause damage to the brain, red blood cells, and kidneys. The greatest risk is to young children and to pregnant women, and their unborn babies. Amounts of lead that won't hurt adults can slow down normal mental and physical development in children, particularly those under 6 years of age. At high levels of contamination, lead can damage adults' kidneys and reproductive systems. And at extremely high levels, lead poisoning can cause mental retardation, coma, convulsions, and death.

A child at play can come into contact with sources of lead contamination—dirt, dust and paint chips—that rarely affect an adult. It's important to wash children's hands and toys often and to try to make sure they put only food in their mouths.

How Lead Can Get Into Drinking Water

Lead contamination is rarely found in sources of water such as rivers, wells, and reservoirs. It's almost never present in water leaving a treatment plant or traveling through water mains. However, USEPA estimates that 10 to 20 percent of human lead exposure may come from drinking water, and infants who consume mostly mixed formula may receive 40 to 60 percent of their lead exposure from drinking water. So, where does it come from?

Lead is present in home plumbing in solders used to join copper pipe and in faucets made of brass and chrome-plated brass. In some

cases, pipes leading from a water main into a home (called service lines) are also made of lead. Lead enters drinking water as a result of corrosion, as water comes into contact with these materials over a period of time. If standing water is in contact with lead materials for several hours, the water may accumulate lead levels that are of concern. Water providers adjust their treatment procedures to achieve "optimized corrosion control," which significantly reduces the amount of lead leaching into the water.

What's Being Done to Protect You

A number of aggressive and successful steps have been taken in recent years to reduce the occurrence of lead in drinking water.

- In 1986, Congress amended the national Safe Drinking Water Act to ban the use of lead in materials in drinking water systems. This legislation prohibited the use of pipe, solder, or flux containing high lead levels.

- The Lead Contamination Control Act of 1988 required schools and day-care centers to repair or remove water coolers with lead-lined tanks. It also directed USEPA to publish guidance to assist schools, local education agencies, and day-care centers in identifying and reducing lead contamination.

- Since the implementation of the Lead and Copper Rule, community drinking water systems have actively managed the corrosivity of water distributed to customers. In addition, community water systems conduct routine monitoring at selected houses where lead solder and other sources of lead are believed to exist. If more than 10 percent of the homes tested have elevated lead levels (defined as more than 15 parts per billion), water providers must notify their consumers via newspapers, radio, TV, and other means. They must also take steps to reduce the problem, including improving corrosion control and possibly replacing lead service lines that contribute to lead contamination.

If you live in Canada, contact your provincial government for regulations on lead.

What You Can Do

While water providers have taken steps to limit lead in drinking water, you can take the following steps if you are concerned about your lead exposure:

Find out about lead testing results in your community. Each utility's annual Consumer Confidence Report contains information on lead monitoring conducted under the Safe Drinking Water Act. If you do not have a Consumer Confidence Report, contact your utility for a copy.

You can't see, smell, or taste lead in your water. Testing at the tap is the only way to measure the lead levels in your home or workplace. If you choose to have your tap water tested, be sure to use a properly certified laboratory. Testing usually costs between $20 and $100.

Flushing your water tap is a simple method to help you avoid high lead levels. Flushing clears water from your plumbing and home service line to ensure you are getting drinking water from the main, where lead is rarely present. Let the water run from the tap until it is noticeably colder (this may take two minutes or longer) before

using it for cooking or drinking. Flushing the tap is particularly important when the faucet has gone unused for more than a few hours, because the longer water resides in your home's plumbing, the more lead it may contain.

The water from this "first flush" need not be wasted. You can use it for other purposes, such as watering plants. You might also consider drawing your drinking or cooking water shortly after a high-use water activity, such as bathing or washing. Those activities flush a significant amount of water from your home's pipes.

If you live in a high-rise building with many water pipes, flushing the tap may not be effective in reducing lead levels. If you are concerned about lead in your drinking water, talk to your landlord or consult your local health department about ways to minimize your exposure.

Use only cold water for cooking or drinking. Lead leaches more easily into hot water than cold water. Boiling water DOES NOT remove lead.

Have a licensed plumber determine if your home contains lead solder, lead pipes, or pipe fittings that contain lead. A plumber can also determine if your home has a lead service line connecting your home plumbing to the community water system's water main. The presence of these materials does not mean you have lead in your water, but the potential exists.

Make sure repairs to copper piping do not include use of lead solder.

- Some home treatment devices remove lead, but not all do. Before you purchase a home treatment device, you should verify the manufacturer's claims. A good resource to assist you is NSF International (www.nsf.org).

Once a treatment device is installed, make sure it is properly maintained. Using bottled water is also an alternative. (Information on the lead levels in bottled water is available from bottled water manufacturers.)

Consult with your family doctor or pediatrician to receive a blood test for lead and learn more about the health effects associated with exposure. The Centers for Disease Control and Prevention recommends all children be tested for lead.

Some Helpful Resources

Your water provider and local health department can direct you to helpful resources about lead in drinking water. Consider visiting these Web sites also:

American Water Works Association
www.awwa.org

NSF International
www.nsf.org

US Environmental Protection Agency
www.epa.gov

US Centers for Disease Control and Prevention
www.cdc.gov

US Department of Housing and Urban Development (HUD)
www.hud.gov